

IN THE CLAIMS:

Please cancel claims 4, 5, and 9-21 without prejudice.

Please replace the text of claims 1, 6, and 7 with the following text:

1. (Twice Amended) A semiconductor device manufacturing method comprising:

a first step of forming, by a thermal chemical vapor deposition method, a silicon nitride film on an object disposed in a reaction container, with bis tertiary butyl amino silane and NH₃ flowing into said reaction container, and

a second step of removing silicon nitride formed in said reaction container, with NF₃ gas flowing into said reaction container, before said silicon nitride film formed in said reaction container reaches a thickness of 4,000 Å.

6. (Twice Amended) The semiconductor device manufacturing method as recited in claim 1, wherein

 said reaction container is made of quartz and a member made of quartz is used in said reaction container.

7. (Twice Amended) The semiconductor device manufacturing method as recited in claim 1, wherein

 said second step is carried out in a state where a pressure in said reaction container is greater than or equal to 10 Torr.

Please add new claims 22-30 as follows:

22. (New) A semiconductor device manufacturing method comprising:

a first step of forming, by a thermal chemical vapor deposition method, a silicon nitride film on an object disposed in a reaction container, with bis tertiary butyl amino silane and NH₃ flowing into said reaction container, and

a second step of removing silicon nitride formed in said reaction container, with NF₃ gas flowing into said reaction container, before said silicon nitride film formed in said reaction container reaches a thickness that generates particles on said object.

23. (New) The semiconductor device manufacturing method as recited in claim 22, further comprising said first step after said second step.

24. (New) The semiconductor device manufacturing method as recited in claim 22, wherein

said reaction container is made of quartz and a member made of quartz is used in said reaction container.

25. (New) The semiconductor device manufacturing method as recited in claim 22, wherein

said second step is carried out in a state where a pressure in said reaction container is greater than or equal to 10 Torr.

26. (New) The semiconductor device manufacturing method as recited in claim 22, further comprising a step of purging said reaction container using said NH₃ gas at least one of before and after said first step.

27. (New) A semiconductor device manufacturing method comprising:
a first step of forming, by a thermal chemical vapor deposition method, a silicon nitride film on an object disposed in a reaction container, with bis tertiary butyl amino silane and NH₃ flowing into said reaction container; and
a second step of removing silicon nitride formed in said reaction container, with NF₃ gas flowing into said reaction container; and
a step of purging said reaction container using said NH₃ gas at least one of before and after said first step.

b6
b7c

28. (New) The semiconductor device manufacturing method as recited in claim 27, further comprising said first step after said second step.

29. (New) The semiconductor device manufacturing method as recited in claim 27, wherein

said reaction container is made of quartz and a member made of quartz is used in said reaction container.

30. (New) The semiconductor device manufacturing method as recited in claim 27, wherein

said second step is carried out in a state where a pressure in said reaction container is greater than or equal to 10 Torr.